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Abstract

The aim of this study is to assess differences and commonalities in the student travel market across different countries and to determine typologies based on touristic attractions/activities. The study generates groups based on travel motivations largely drawn from the Leisure Motivation Scale and other relevant tourism literature. To achieve the aim, data is obtained from a sample of 3,431 respondents from eight countries i.e. Brazil, India, Malaysia, Pakistan, Portugal, Spain, Thailand, and the USA. The data are analysed using two Principal Component Analyses (PCA), a combination of two clustering methods - the Ward method, and an optimal solution method, the K-Means method. Seven clusters based on touristic attractions/activities emerged. The findings from the current study suggest that perceptions of touristic attractions/activities are different by country although some similarities do exist. Besides providing important new insights for theory, this large comparative study also suggests synergies that could be generated from the information for both destination marketers and managers.

Keywords	tourist motivations; attractions/activities; student travel; comparative study; typologies
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We want to thank you for this last check of our manuscript. We hope this last version conforms the requirements of the journal.

We look forward to receiving your acceptance of our manuscript.

Sincerely,
The authors

Highlights:

The study identifies:

- New insights by analysing the student travel market from eight countries;
- Differences across countries based on attractions and motivations;
- Seven tourists' typologies based on destination touristic attractions/activities;
- How tourists from eight countries are distributed across the tourist typologies;
- Implications for destination marketers and managers by suggesting country synergies.

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A Multinational Comparative Study Highlighting Students' Travel Motivations
and Touristic Trends

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Abstract

The aim of this study is to assess differences and commonalities in the student travel market across different countries and to determine typologies based on touristic attractions/activities. The study generates groups based on travel motivations largely drawn from the Leisure Motivation Scale and other relevant tourism literature. To achieve the aim, data is obtained from a sample of 3,431 respondents from eight countries i.e. Brazil, India, Malaysia, Pakistan, Portugal, Spain, Thailand, and the USA. The data are analysed using two Principal Component Analyses (PCA), a combination of two clustering methods - the Ward method, and an optimal solution method, the K-Means method. Seven clusters based on touristic attractions/activities emerged. The findings from the current study suggest that perceptions of touristic attractions/activities are different by country although some similarities do exist. Besides providing important new insights for theory, this large comparative study also suggests synergies that could be generated from the information for both destination marketers and managers.

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1. Introduction

Significance of youth travel including the student segment has been noted right from the start of the current century. A joint report by the UNWTO and the WYSE Travel Confederation (2011, p.8) states that the commercial significance and growth of this segment is evident in the fact that between 2000 and 2010, international arrivals rose from 136 million to 187 million, representing 20% of global travel. Furthermore, whilst the youth population may not significantly increase in the coming years, youth travel will do so, as young people gain access to more disposable income and travel becomes increasingly affordable. The report also suggests that the traditional age of the market, 18-24, has expanded at both ends of the spectrum to encompass people of 15-30 years plus, and that the average youth traveller spends US\$1,000 to US\$6,000 per trip and stays longer (over 50 days) than the average tourist (US\$1,450). Higher Education has been shown to be the best performing sector, not having lost any of its attraction during the economic downturn.

The student travel market continues to attract researchers due to its multidimensional and unique characteristics in terms of activities preferences, interest in natural and cultural attractions, and what motivates them to travel. This appeal is further enhanced due to limited research and the promising potential evident from receipts reaching US\$ 165 billion in 2010 (Chen, 2012; Kim, Hallab, and Kim, 2012; Limanond, Butsingkorn, and Chermkhunthod, 2011; UNWTO and WYSE, 2011; Xiao, So, and Wang, 2015). Other studies suggest that even short study trips could influence their attitudes towards and perceptions of travel (Bywater, 1993; Carr, 2005; Eom, Stone, and Ghosh, 2009; Hobson and Josiam, 1992; Peggy, 2011). The growing trend of international student exchange programmes, international internships, ease of travel due to reduced fares and flight connections, have all added to an increase in student travel.

Several studies suggest that perceptions and previous travel experiences influence travel motives to a destination (Beerli and Martin, 2004; Bonn, Joseph, and Mo, 2005; Chon, 1991; Echtner and Ritchie, 2003; Xiao et al., 2015). Hence, assessing perceptions about destinations, touristic attractions/activities, trends and specific interests of student travellers is of both literal and commercial benefit. Furthermore, establishing commonalities in tourists' characteristics leads to the establishment of commonalities in tourist markets. One way to create meaningful commonalities is through comparative studies. Commonalities help to achieve economies of scale by forming the basis for an appropriate segmentation of the market. Subsequently, such commonalities enable the development of customised promotions, and touristic activities, thereby generating memorable experiences and satisfaction from a vacation. Previous research to determine commonalities in cross-national studies has largely either been overlooked or mostly limited to two or three countries for the study. Hence, it is an area still under exploration (Li, 2014; Shoham, Schrage, and van Eeden, 2004).

In studying the travel behaviour of undergraduate students of two nationalities i.e. the UK and China, Xu, Morgan, and Song (2009) found similarities between the two groups as they both

enjoyed beach holidays, and placed importance on having fun and relaxation after their studies; but in other ways the two groups showed significant differences. The Chinese students considered seeing famous sights and learning about other cultures and history to be more important whereas the British students considered having fun, socialising and outdoor adventure more important (Xu et al., 2009). Wang and Walker (2010) also state in their study that despite the importance of student travel as a global phenomenon, few cross-cultural studies have examined this topic. They compare similarities and differences in travel motivations, the role of gender, and culture between Canadian and Chinese university students. Another example of a study exploring differences or commonalities is that conducted by Kozak (2002), who studied motivational differences between tourists from the same country visiting two different geographical destinations, and those from two countries visiting the same destination. Kozak (2002) concludes that the literature suffers from a lack of empirical work addressing differences in tourists' interest in activities/attraction and motives.

Despite the impact of such lack of insight into this important area of tourist motivation, little headway has been made in that field in respect of comparative studies involving the student travel market, and by implication, the tourists of the future. According to a meta-analysis undertaken by Li (2014), between 1988 (when the first paper on comparative studies in tourism management was published) and 2011, only 91 articles reported comparative investigations; these covered a range of eight topics, one of which was travel motivation (represented by only nine studies, thereby reflecting a dearth of comparative research focusing on travel motivation). Moreover, of those with a travel motivation focus, none involved more than three countries; hence there is no information in the literature regarding large-scale multinational studies.

The current study attempts to fill the gap identified and to bring new insights to the tourism literature through a comparative study that explores the travel motives of students from eight countries, i.e. Brazil, India, Malaysia, Pakistan, Portugal, Spain, Thailand and the USA. The eight countries were selected based on their representativeness of different parts of the globe and ethnicities. A sample of 3,431 students is obtained, and considered valuable as students are regarded as tourists of the future in the current study.

The three main research objectives and questions proposed by the current study are:

- 1) The literature at present, on one hand suggests that commonalities of interests and motives in tourism generates synergies for planning (Li, 2014; Shoham et al., 2004; Wang and Walker, 2010; Xu et al., 2009), on the other hand, study of such commonalities is limited to 2-3 countries representing typically an Asian and a Western nation (Bicikova, 2014; Shan, Shah, and Suat, 2013; Wang and Davidson, 2008; Wiers-Jensses 2003; Xiao et al., 2015). To address this limitation in the literature, the current study investigates at a multinational level and poses the following question:

Are there any commonalities and differences in travel motivations between the Asian, North and Latin Americans and the European university students?

- 2) Touristic activities/interests offered by different destinations to enhance the experience of visitors have been widely studied (Bicikova, 2014; Bentley, Page, and Laird, 2003;

Correia, Valle, and Moco, 2007; Crompton, 1979; Dotson, Clark, and Dave, 2008; Heung and Leong, 2006; Jonsson and Devonish, 2008; Kim, 2007; Loundsbury and Hoopes, 1998; Meng and Uysal, 2008; Newlands, 2004; Pizam, Jeong, Reichel, and van Boemmel, 2004; Ryan and Glendon, 1998; Trunfio, Pettruzzellis, and Nigro, 2006; William and Soutar, 2000; Xu et al., 2009). However, one objective of this study is to extend the current literature by trying to find out what commonalities/differences in interests in touristic activities/attractions exist around the globe? Hence the following question is raised:

What are the commonalities and differences in contemporary trends/interests in selection of touristic activities by the Asian, North and Latin American and the European University Students?

- 3) Though several studies have investigated tourist typologies and generated findings that highlight how tourists could be grouped based on common characteristics (Ballantyne, Gannon, Berret, and Wells, 2012; Bicikova, 2014; Chhabra, 2012; Echtner and Ritchie, 1993; Hallab, Price, and Fournier, 2006; Li, 2014; Shoham et al., 2004; Wang and Walker, 2010), the current literature lacks a large scale multinational information to determine what typologies might emerge if touristic characteristics are investigated using absolutely the same tool in different countries representing different continents. Following research question is raised to seek some answer:

What are the typologies of University Students based on interests in touristic activities/attractions, originating as potential tourists from Asia, the North and Latin America and the Europe?

Consequently, the study focuses on both the psychographics (interest in touristic activities/interests) and travel motivation based on national origins.

2. Literature Review and Theoretical Background

2.1. Student traveller market

Today's student traveller is looking to experience a unique memorable holiday based on social interactions (Morgan and Xu, 2009). Studies also suggest that student travellers are more prepared to take risks and seek thrills (Pizam et al., 2004). This adventure-seeking or longing to discover new experiences as part of travel motives is growing (Bentley et al., 2003; Bicikova, 2014; Heung and Leong, 2006; Morgan and Xu, 2009; Pearce and Lee, 2005; Xu et al., 2009). The travel motivations and attractions/activities debate has been relevant in the tourism management subject area for the last 20 years, yet all of the studies conducted by scholars have predominantly included samples limited to one or a few countries (Li, 2014). This limits the current literature about information derived from a large scale multinational study to help tourism destination planning and policy implications. Consequently, recent studies have advocated the need for more studies comparing samples from different nationalities and countries (Ballantyne et al., 2012; Bicikova, 2014; Chhabra, 2012; Echtner and Ritchie, 1993; Hallab et al., 2006; Li, 2014; Shoham et al., 2004; Wang and Walker, 2010).

The fact that research on youth tourism is scarce, according to Gherrissi-Labben and Johnson (2004), Grigolon, Kemperman, and Timmermans (2012), is likely to be linked to two major reasons – stakeholders in the industry may perceive the youth market to be unimportant due to its low spending power and stereotyped image of behaving badly, and choosing only budget accommodation. However, the growth of this market segment in both developed and developing economies is initiating a change in thought for both researchers and practitioners.

2.2 Destination choice and tourist typology

Choosing a travel destination is a very complex process with many influencing factors. Indeed, in many appraisals of tourist and consumer behaviour, the choice of a product (or destination) is viewed as the central topic in the whole area of study (Bagozzi, Gruhan-Canli, and Priester, 2002). Additionally, it can be noted that destination-related topics are of major interest to regional tourism marketers (Pearce, 2005). In choosing a destination, tourists are making multiple commitments, which are of key interest to the businesses providing these services. Tourist places are not just “used” or “promoted” by the tourism industry, but are frequently shaped by marketing efforts (Pearce, 2005). The substantial emphasis on these issues in tourism research may be linked directly to the orientation of researchers who believe that facilitating business success is the dominant goal of their work (Gunn, 1994). Academic and scholarly studies that can better understand and even help to influence the product choice process are therefore likely to be seen as amongst the most relevant tourist behaviour research for practitioners.

A tourist typology helps to explain the interaction between destination and tourist characteristics in the destination choice process. However, previous studies on travel decision-

making typologies concentrate on various factors concerning the tourist such as personality traits (e.g. Cohen, 1972; Plog, 1974). There is a lack of research focusing on the key points of the destination choice process. Moreover, Smallman and Moore (2010) criticise that studies on destination choice are to a great extent theoretical approaches and often lack empirical verification. Therefore, Karl, Reintinger, and Schmude (2015) in their study of “Reject or select: Mapping destination choice” empirically investigate the rejection or selection of destinations during the destination choice process by focusing on the key points of the destination choice structure. Their research analyses the interaction between destination choice and tourist typology of German tourists (realistic planner, unrealistic planner, day dreamer and adventurer, etc). The result shows that the factors age, gender, travel frequency and travel motives and interests in attractions/activities are significant determinants of the destination choice. For example, realistic planners (179 respondents, female, 40-49 years old and highly educated) are characterised by travelling to safe and familiar destinations. They prefer individually organized holidays and are particularly interested in cultural/educational or natural themes as well as the country and people of the visited destination. On contrary, day dreamers (565 respondents, females, between 30 and 39 years, with a high educational level) prefer to go on a package trip and to spending a relaxing but sporty nature/sun holiday. Other types of tourists include unrealistic planners (75 respondents, females, between 20 and 29 years old, with a high education level) who are characterised by a relatively high tendency to visit extraordinary but non-risky relaxing holiday destinations, and adventurers (472 respondents, males, between 20 and 29 years and between 50-59 years, with a high educational level) who tend to plan an individually organized sport/cycling/hiking trip, are frequent travellers and attracted by extraordinary experiences and cultural/natural aspects while travelling.

2.3 Attitude and destination choice

Millions of tourists travel temporarily away from home to experience hospitality and explore the world around them. This fact is supported by the growth in tourism numbers worldwide (UNWTO, 2017). The movement generates demand and tourists participate in the purchase and consumption process of the tourism and hospitality product of their destination (Mohsin, 2005). Attitudes have been one of the most popular variables used in the consumer behaviour field to try and predict consumer choice behaviour (Um and Crompton, 1990). Knowledge of tourist attitudes becomes useful for marketing purposes and sustainability of hotels, restaurants, transport systems, retailers, tour operators and travel agents etc. Potential travellers generally have limited knowledge about the attributes of a destination which they have not previously visited (Um and Crompton, 1990). For this reason, attitude dimensions of a place as a travel destination are likely to be critical elements in the destination choice process, irrespective of whether or not they are true representations of what that place has to offer (Um and Crompton, 1990). In addition, the marketers of tourist destinations need to be aware of these factors as travellers become more experienced, so the more a destination has to provide a product with integrity (Coathup, 1999). Um and Crompton (1990) suggest that attitude is a significant indicator for predicting whether or not a vacation place is selected as a final destination from the alternatives in the awareness set. Further studies, specifically involving the student travel

market to identify the role of attitudes in an individual's travel destination choice process, are expected to contribute in confirming the differences or similarities of Um and Crompton's (1990) and Mohsin's (2005) findings.

2.4 Students' travel and tourism typologies based on touristic attractions/activities

Several authors have suggested from their studies that tourists usually look for different activities and experiences depending on their own stage of life since this personal situation has an impact on their travel needs and choice of activities (Dotson et al., 2008; Kim, 2007). As expected, students and young travellers are more prepared to take risks and seek thrills (Pizam et al., 2004) which tends to influence their choice of touristic attractions/activities. However, these motives could differ from individual to individual, from segment to segment or even within homogenous segments such as students; this appreciation generates a need to continuously explore and research tourism typologies (Correia et al., 2007; Jonsson and Devonish, 2008; Kim, 2007; Meng and Uysal, 2008; Trunfio et al., 2006). The search for thrill-seeking or adventure-seeking or discovering new experiences as part of travel motives is growing (Bentley et al., 2003; Bicikova, 2014; Heung and Leong, 2006; Morgan and Xu, 2009; Pearce and Lee, 2005; Xu et al., 2009). This produces further challenges both for tourism researchers and marketers, requiring them to continuously assess contemporary trends, target markets, marketing strategies, and also to have economies of scales in place through synergies in destination promotions, and customised service and product bundles for tourists. Hence, examining tourists' interest in attractions/activities and then promoting attractions/activities of a destination which are known to excite them, results in choice of a destination and significant satisfaction from that travel. This helps to foster a meaningful experience that will be remembered from that travel (Kim, 2014). Further the literature suggests that segmenting the tourist market based on commonalities of interests in attractions/activities, as they help to influence the destination choice, generates synergies in planning destination management and marketing strategies (Li, 2014; Shoham et al., 2004; Wang and Walker, 2010; Xu et al., 2009).

2.5 Comparative studies on students' travel motives

Studies on students' travel motives and their interest in different touristic activities have been of interest to several researchers. However, such studies are scarce, and where they exist, they are limited to few countries, for example, Wiers-Jensses (2003) – Norwegian students; Wang and Davidson (2008) - Chinese students; Shan et al. (2013) - international students' perception of Malaysia; Bicikova (2014) - British students; Deresiewicz (2009) and Chen (2012) - American students; Xu et al. (2009) - studied students travel behaviour from the UK and China; Shoham et al. (2004) - travel behaviour of US, South African, and Israeli students; Phau, Shanka, and Dhayan (2009) – students' travel intention with regard to Mauritius. It is also noted that Bicikova (2014) and Xiao et al. (2015) state in their studies that despite general perceptions of a lucrative student travel market, largely the market remains under-researched.

3. Methodology

3.1 Sample and data collection procedure

To meet our purpose of describing the patterns of interest in touristic activities/interest and behaviour across different countries, students from eight countries - Brazil, Portugal, Spain, the USA, Malaysia, Thailand, India, and Pakistan – have been surveyed. The data was collected physically from universities in eight different countries using local network relationships. Students were approached in public places within the university, they had the option to participate or refuse. The data collection was administered by experienced researchers with the support of graduate students who also had prior experience in data collection procedures. All participants agreed to provide their opinions, no names or contact details were required in compliance of the ethical process. Participants had the option to withdraw from the survey any time.

The same structured questionnaire was used in all eight countries to gather datasets. Initially, the instrument was written in English and then translated into the local language, if English was not used as the main language of instruction. Hence, a translation was undertaken for Brazil, Portugal, Spain, and Thailand, but the English version was administered in Malaysia, India, Pakistan, and the USA. Bi-lingual academic experts were used to assess the translations, and other academics with expertise in tourism management subsequently assessed the content validity of these translated versions of the questionnaire. Following Churchill's (1979) procedure, we refined the measures based on the feedback given by academic researchers with expertise in the field of tourism management. The questionnaire was then back-translated into English to check for any inconsistencies with the original English version and to enhance translation equivalence (Craig and Douglas, 2005; Van de Vijver and Leung, 1997).

The country samples were composed of students, as potential tourists, and in total, 3,431 usable questionnaires were collected (Table 1 shows sample sizes for each country).

3.2 Measures

The structured survey questionnaire contained three sections. The measures used in the first section were largely based on the Leisure Motivation Scale (Beard and Ragheb, 1983) and its modified version used by Ryan and Glendon (1998). The other measures relating to touristic attractions/activities offered by any destination with similarity to New Zealand's attractions/activities¹, were adapted from the work of Mohsin (2005), Mohsin and Ryan (2007), and Mohsin and Alsawafi (2011). These comprised the second section of the questionnaire. Other studies which helped to develop measures and gauge perceptions about the travel and touristic attractions/activities of interest to students included those by Kim (2007), Dotson et al. (2008), Pizam et al. (2004), Correia, et al. (2007), Jonsson and Devonish (2008), Meng and

¹ Several authors recommend being as specific and objective as possible when asking questions in a questionnaire (Churchill, 1979; DeVellis, 2003), to obtain more accurate answers from respondents. Therefore, New Zealand was the destination chosen as it is a destination with a great variety of attractions and activities.

Uysal (2008), Trunfio et al. (2006), Ryan and Glendon (1998), Loundsbury and Hoopes (1998), Newlands (2004), William and Soutar (2000), Crompton (1979), Bentley et al. (2003), Heung and Leong (2006), Xu et al. (2009), and Bicikova (2014). The third section collected demographic information about the respondents.

All measures were assessed on a 7-point Likert Scale which ranged from 1 (of no importance) to 7 (extremely important).

3.3 Data analysis procedures

The data analysis procedure was composed of three major drivers according to the aims of the research: (1) the characterisation of potential tourists by country, and identification of their differences and commonalities in terms of destination attractions/activities, travel motives, and socio-demographics, (2) the definition of tourists' typologies according to the touristic attractions/activities, and lastly, (3) the relationship between country and typologies of potential tourists. To characterise the potential tourists, two Principal Component Analyses (PCA) were undertaken on the touristic attraction/activities and motivation statements for data reduction purposes. In order to address the second aim of the study, a combination of two clustering methods was used to find homogeneous groups of potential tourists to any tourist destination with similarity to New Zealand's attractions/activities. These clustering methods - a hierarchical, the Ward method, and an optimal solution method, the K-Means method - enabled a final clustering solution to be reached. In the K-means clustering method, the allocation of observations to clusters is optimal according to the minimisation of the within-cluster variation. However, the K-means method requires knowledge about the number of clusters and an initial solution before the technique can proceed to cluster the observations. In addition, its performance can be significantly improved when the results from a hierarchical method are used to form the initial solution instead of using random initial solutions (Sharma, 1996). Therefore, the Ward method was used first based on the touristic attractions/activities' Principal Components (PC) to determine the number of clusters and to obtain the initial solution to be used by the K-means algorithm. The typologies obtained were then named according to the destination's attractions/activities and profiled in terms of motivations and socio-demographics. Subsequently, a Discriminant Analysis was performed also in order to identify combinations of destination attractions/activities that act together to best discriminate between the clusters. These sets of variables or discriminant functions are dimensions of discrimination. This analysis was intended to validate the cluster solution and to summarise information to allow the relationship between nationalities of students as the potential tourists and their typologies, to be plotted. Therefore, the third aim was achieved by understanding how potential tourists from different countries are distributed across the various tourist typologies.

Parametric (One-way ANOVA) and Non-parametric (Kruskal-Wallis and Chi-Square) tests were used to assess differences between groups and between nationalities of respondents. Measures of descriptive statistics were also used in order to characterise the sample and the potential tourists by nationality and typologies.

All analyses were developed using IBM SPSS version 23.

4. Results

4.1 Differences among nationalities

4.1.1 Socio-demographic profile

The distribution of respondents' socio-demographic characteristics is presented in **Appendix 1** and can be summarily described as follows: (1) Although the samples are balanced in gender terms for the majority of countries represented in the survey, there is evidence of differences among the respondents from India (more than three quarters are male) and Spain (60.6% are female); (2) Respondents from the Western countries are younger than those from the Asian countries like Malaysia, India, Pakistan, and Thailand. Usually, Asians are older when they make their own decisions to travel. As a consequence, the percentage of Asian respondents by course frequency is higher in Masters' programmes; (3) Among the Malaysian, Brazilian, and Pakistani groups, there are the higher numbers of married people with children. For instance, 25.3% of students from Malaysia are married and 23.2% have children; (4) Regarding the personal income, the distribution of respondents is centred in the below average and average categories of income, with the exception of the Pakistanis who have more than 20% in the above average category. This could be a result of the fact that Masters' students were chosen for the sample based on the advice from senior academics in Pakistan, as they represent higher potential to travel in near future compared with the country's undergraduate students. Most Masters' students in Pakistan were mature in age and working.

Insert Table 1 about here

4.1.2. Preferences for touristic attractions/activities

A PCA was carried out in order to reduce the initial set of 39 touristic attractions/activities' variables. **Appendix 2** presents the summary of the PCA results. Eight principal components were identified, and these were responsible for explaining 61.4% of total variance. Promax rotation was used because it achieved a simpler and theoretically more meaningful solution than the traditional varimax method (Hair et al., 2005). The significance of Bartlett's test of sphericity ($p < 0.01$) and the Kaiser-Meyer-Olkin (KMO) statistic value of 0.924 indicate that the data are suitable to identify dimensions. Ten items were removed from the analysis because

of high loadings in various dimensions. In the final solution, all loadings and Cronbach's alphas were above the recommended thresholds (0.5 and 0.6 respectively; Hair et al., 2005).

The principal components were named "Experiencing Adventure", "Experiencing Native Culture", "Complementarity/Experiencing Sites", "Experiencing Generic Wildlife", "Country Pursuits", "Functionality", "Urban Experience", and "Experiencing Specific Wildlife".

The first retained principal component, "Experiencing Adventure", explains 28.8% of total variance, meaning that this new variable relating to the adventure experience explains almost half of the variability of the initial items set (61.4%).

Table 2 shows the preferences by the students from different countries in respect of the touristic attractions/activities. Standardised means were used to characterise individuals according to each PC and ten items were removed from the PCA². However, four of these items were included in the analysis because they are important attributes of the tourist destination. The items are as follows: "Visit places that are different to elsewhere", "Experience Dolphin swim", "View geothermal activity and glaciers" and "Go bush walking".

Insert Table 2 about here

The preferences for touristic attractions/activities are different by country although there are some similarities among respondents of certain groups of countries. Students from the West show similarity concerning what they do not value, such as country pursuits, functionality and specific wildlife experience. Activities/attractions such as go fishing or hunting, go to farm shows, conduct business, visit friends or relatives or go sightseeing have no appeal when choosing a destination. Within these respondents, Brazilians are those who value the majority of touristic attributes least. However, there are many appealing attributes in this group among the Western respondents. For instance, the Portuguese prefer visiting different places, as do the Americans, and also like to experience adventure and cities, and walking.

In contrast, Asian students give importance to touristic attributes. Thais consider many of them interesting, although they prefer those related to the urban experience, functionality, and specific wildlife, native culture, geothermal activity, and glaciers experience. Malaysians also value the urban experience and country pursuits as well as the native culture. Respondents from

² Although some items had been removed from the PCA process because of collinearity issues (as a consequence they load highly in various dimensions), they can be introduced in posterior analyses according to their importance to a particular analysis.

the two countries of the meridian Asia (India and Pakistan) are more similar. They are attracted by the country pursuits, functionality, and the sites experience.

4.1.3. Travel motivations of student tourists

A second PCA was carried out to reduce the 16 items of students' travel motivations (for PCA solution results see **Appendix 3**). Four dimensions were uncovered explaining 55.5% of total variance and named as follows: "Relax", "Challenge and Enjoy", "Social Connections" and "Discovery". One variable, "To increase my knowledge", was excluded from the analysis because it had high loadings in all PC. We applied Promax rotation for the same reasons as in the previous PC calculation. Both the Bartlett's test of sphericity ($p < 0.01$) and the Kaiser-Meyer-Olkin (KMO) statistic (value of 0.854) point to a suitable solution. All loadings and Cronbach's alphas are also above the recommended thresholds (Hair et al., 2005).

The four PC and the "Knowledge Improvement" item³ were used to characterise the respondents by country as well as the typologies (see Section 4.2).

Table 3 presents the tourism motivations of respondents by country. Students from the USA, Portugal, and Spain are motivated to travel to discover new cultures and places and to explore new ideas. Americans are also motivated to find social connections. On the other hand, the visit motives of Thai and Malaysians are more centred on relaxing, challenging and enjoying the place, and social connections. Indians have motives related to challenging and enjoying, and improving their knowledge.

Insert Table 3 about here

4.2. Typologies of students as potential tourists

The typologies of students as potential tourists were created using the Ward and K-means clustering methods based on the preferences for touristic destination attributes. Therefore, the PC of attractions/activities, jointly with four of the ten items removed from the PCA were considered as the clustering basis. These four items are the same as those used in the previous characterisation concerning the respondents' countries.

³ As the PC scores were standardised, as also was the "Knowledge Improvement" item.

Seven clusters were identified by the Ward method. The obtained Ward solution was used as initial solution for the K-means method. Table 4 presents how each cluster values the destination attributes. Cluster size is shown in **Appendix 4**.

Insert Table 4 about here

The name assigned to each cluster was based on its distinctive attractions/activities as follows:

Cluster 1 is the largest cluster corresponding to 19.7% of respondents. Members of this cluster are more attracted by country pursuits, functionality, site experiences (e.g. seeing memorable sunsets, visiting sights associated with famous films, attending rugby events, and kiwi bird watching) as well as going bush walking. They are less attracted by the urban and the specific wildlife (albatross and seal colonies) experiences. Therefore, these cluster members are called “Explorers”.

Clusters 2 and 3 have 12.9% and 14.4% of respondents respectively. Members of cluster 2 do not value experiences related to walking, appealing sites, country pursuits, and nature and generic wildlife; instead, they are attracted by the destination functionality, experiences lived in cities, and those related to wildlife colonies. They also appreciate seeing geothermal activity and glaciers, and like to visit the different places the destination provides. Thus, they are called “soft explorers”. Cluster 3, on the other hand, is composed of “sightseers”, since they appreciate the majority of the touristic features with the exception of the country pursuits and the functionality aspects. However, it is worth noting that visits to different places and experiences in nature, and those related to generic wildlife, are what attract these students the most.

Clusters 4, 5 and 6 are comprised of individuals who are least attracted by the features and attractions/activities of destinations. Cluster 5, the smallest (composed of only 6% of respondents) cluster, contains those who show the least appreciation of the identified features, and who can be described as individuals who really do not appreciate tourism. This group is considered as not relevant to any tourist marketing attention because it is not one worthwhile of trying to attract, and hence, people in it are called “avoiders”.

In size terms, clusters 4 and 6 are similar (13.5% and 14.8% respectively), but they differ in the way they evaluate destination features. Cluster 4 appreciates visiting unique touristic places; for this reason, its members are called “novelty seekers”, although they do not value the remaining attractions/activities, namely native culture, country pursuits, the specific sites, the generic wildlife, go bush walking among others. In contrast, those in cluster 6 only give importance to destination functionality and visit different places is the less appreciated by them. Therefore, they are called “functionality seekers”.

Cluster 7 is the second biggest cluster, comprising 18.7% of the respondents. As these individuals are those who show more appreciation of all the destination’s attractions/activities, they are called “tourism lovers”.

Table 5 presents the distribution of travel motivations by cluster (for distribution of socio-demographics by cluster see **Appendix 4**). Analysing these values, we can complement the cluster descriptions as follows:

(1) The Explorers (members of cluster 1) give more importance to challenge and enjoyment when travelling. They are mainly male (68.6%), single (94.8%) and 20.2% of the cluster have high or above average personal income; (2) Members of cluster 2, the Soft Explorers, equally value all travel reasons with the exception of knowledge improvement. Of the cluster, 10% are married and have children. More than half have average personal income; (3) The Sightseers (cluster 3) look to discover new places and cultures above all. Challenge to their abilities, and the need to experience a feeling belonging are not reasons to travel. They are mainly female (60.4%) and have low personal incomes; (4) In terms of attractions/activities, clusters 4, 5 and 6 - Novelty Seekers, Avoiders, and Functionality Seekers respectively - also give little importance to tourism motives. Once again, the Avoiders have the lowest mean scores in all motives, confirming that they are not motivated to travel at all, as previously pointed out; (5) Novelty Seekers value personal challenge and a feeling of belonging less, while the Functionality Seekers do not value the discovery of new cultures and places. The former is composed of equal numbers of men and women and has a large percentage of members (20.3%) with high personal income or above average. In contrast, the latter group contains more men (64.4%) than women, and 13.6% are married; (6) The Tourism Lovers value all reasons to travel. In addition, the importance of this group can be strengthened because 17.9% of those within it enjoy high or above average personal income.

Insert Table 5 about here

Table 4 shows that there are differences in attraction preferences between clusters (for all variables $p < 0.01$). Therefore, we are interested in identifying sets of variables that may be useful in discriminating between groups, i.e. the variables that most account for the differences in the average score profiles of the seven clusters. The discriminating variables are used in combination to improve upon the discriminating power of any individual variable. To this end, discriminant functions can be formed with two or more discriminant variables to act together in discriminating between the groups.

Appendix 5 provides the overall stepwise discriminant analysis results. The overall goodness-of-fit for the discriminant model is statistically significant and the discriminant functions are also highly significant ($p < 0.05$). The percentage of correctly classified cases is 94.4% meaning that the K-means cluster analysis consistently revealed the segmentation structure of the data. The loadings that identify the discriminant variables for the rotated solution are also reported in **Appendix 5**.

The first function accounts for 73.8% of the variance explained by the set of the six functions, the second function explains that 16.1% and 10.1% of the variance is due to the remaining four discriminant functions. As the two first functions explain about 90% of the total variance, only these two are used in the subsequent analysis. These functions display canonical correlations of 0.918 and 0.734, meaning that 84.3% and 53.9% (squared correlation) of variance in the clusters can be explained by the first and the second functions, respectively.

Go Bush Walking is the descriptor of function 1 according to the largest loading between each variable and any discriminant function⁴. With the same reasoning, the second function can be described by the variables relating to Experiencing Native Culture, and Specific and Generic Wildlife.

Figure 1 displays the discriminant functions in terms of how they differentiate between groups⁵. Function 1, or Go Bush Walking, primarily differentiates between groups of Novelty Seekers (4), Avoiders (5), and Functionality Seekers (6) *versus* groups of Explorers (1), Soft Explorers (2), Sightseers (3) and Tourism Lovers (7), whereas function 2, described by Experiencing Native Culture, and Specific and Generic Wildlife, distinguishes between groups of Sightseers (3), Novelty Seekers (4), and Soft Explorers (2) in a lower scale, *versus* groups of Explorers (1), Avoiders (5), Functionality Seekers (6), and Tourism Lovers (7).

Insert Figure 1 about here

⁴ Complementarity/Experiencing Sites and Country Pursuits also correlate with DF1 but their standardized loadings (0.264 and 0.321, respectively) are lower than 0.4, the cut-off point recommended for interpretation purposes (Hair et al., 2005).

⁵ It is noteworthy that Figure 1 intends to show how clusters relate to in terms of the two discriminant functions. We do not intend to show the size of each cluster as they overlap.

Function 1 has the most potent discriminator and it primarily separates groups of Novelty Seekers (4), Avoiders (5) and Functionality Seekers (6) from the other groups. It is noted that these three groups are composed of those who are least attracted by the destination features and attractions/activities.

4.3 *Relationship between nationalities and typologies of potential tourists*

Table 6 shows how students of each country are distributed across the clusters. The Western respondents are more concentrated in clusters 3 and 4 while Asians appear in larger proportions in clusters 1, 6 and 7. Brazilians are an exception: they are distributed across clusters 4, 1 and 7. These findings are not surprising as they are in accordance with the above description of what attract respondents the most. That is, more than half of Americans, Portuguese, and Spanish students are Sightseers and Novelty Seekers as they are more attracted by the idea of visiting different places. Pakistanis, Indians, Thais, and Malaysians are mainly distributed across the groups of Explorers, Functionality Seekers, and Tourism Lovers (clusters 1, 6 and 7 respectively); they are more attracted by the country pursuits, the functionality of destinations, and also by site experiences, which are characteristics of the members of these groups. Thais have more than a quarter of their respondents in the second cluster, the Soft Explorers, who are mainly focused on the functionality of destinations as they are close to places where they can do business and study.

Insert Table 6 about here

Figure 1 also displays the country of the respondents. However, given the large number of respondents, it is difficult to analyse how preferences for attractions/activities by country are distributed by the clusters' discrimination functions. Therefore, Figure 2 attempts to overcome this limitation by representing the seven clusters and country centroids (means) based on the reduced space co-ordinates of the discriminant functions. As noted above, the first discriminant function distinguishes between groups 4, 5 and 6 *versus* 1, 2, 3 and 7⁶, and the second

⁶ Note that cluster 2 (*Soft explorers*) has a quite negative mean (-0.651) in the Go bush walking variable (Table 4), but a positive centroid in DF1 (Figure 2). The apparent contradiction in cluster 2 is due to the existence of other influences in DF1 with weak correlations. See the previous note.

distinguishes 3, 4 and 2 from the other groups. When we compare the touristic attraction by country, Western students clearly prefer different attributes than do Asians. All the respondents' countries are placed along the second discriminant function meaning that the differences among students' preferences are centred on the main discriminant variables of this function: Experiencing Native Culture, and Specific and Generic Wildlife. Asian students give importance to these touristic attributes the most.

Insert Figure 2 about here

Concerning the discriminant characteristics of these typologies, the Western respondents are more concentrated on clusters 3 and 4 (below the horizontal axis) confirming the above analysis. In contrast, Asian respondents are more concentrated on the Explorers (1), Soft Explorers (2), and Functionality Seekers (6) clusters.

5. Discussion

The continual growth and diversification in tourism (UNWTO, 2017) has attracted both the academic researchers and destination managers and marketers. The tourist destination choices available globally, changing attitudes/behaviour of different market segments and often lack of empirical evidence generate several current issues that are related to the destination choice process (Bagozzi et al., 2002; Karl et al., 2015; Smallman and Moore, 2010). This study, with a comparative approach, helps to explain how destinations are chosen based on attitudes, activities and new trends offered by destinations.

Studies using multinational samples is scant on the tourism management literature. To address this gap in the extant literature, this study uses samples of eight different countries representing North and Latin America, Europe, and Asia.

In order to achieve the purposes of this study and answer the three research questions that have been posed on the introduction section, a list of touristic attractions/activities offered by destinations such as New Zealand was generated to measure respondents' level of interest. The list was largely adapted using the works of Mohsin (2005), Mohsin and Ryan (2007), and Mohsin and Alsawafi (2011). Reference was also made to other studies in order to examine travel motives and establish tourists' typologies.

The first research question of the study seeks to assess whether there are commonalities or differences in travel motivations among students from the eight countries. Shields (2011) finds that desire to travel begins with early and varied travel experiences and that it motivates future travel behaviour. The author further states that the development of effective travel and tourism marketing strategies is influenced by the understanding of several variables that affect travellers' perception of travel. For instance, Nyaupane, Paris and Teye (2011) found in their study that *social motivation* was the most influential factor in American university students' pre-trip attitude. Findings of the current study suggest that *discovery* of new cultures and new places, and the exploration of new ideas are common strong motivations amongst the American, Portuguese and Spanish students. It can also be pointed out that there is some interest in *discovery* amongst the Malaysian and Brazilian students, according to Table 3. However, the Indian, Pakistani and Thai students do not reflect interest in *discovery* as a motivation to travel. It is also interesting to note that American students show a strong preference for *social connections* which has also been identified in the study of Nyaupane et al. (2011). This characteristic of travel motivation is quite strongly shared by the Malaysian and Thai students, and to a lesser extent by the Brazilian and Portuguese university students. The Indian or Pakistani students do not seem to be interested in *social connections*. Hence, it can be appreciated that even within the Asian nations where social relationships are perceived to be important, there are differences. On the other hand, in the Western World, Americans show a strong interest in *social connections* whereas the Spanish show no interest, very much like the Indian and Pakistani students. This outcome provides a new comparative insight which should have a striking impact on future marketing strategies targeting those markets.

Further, the study investigated whether *relaxation* is a travel motive when planning a holiday. Studies from Trunfio et al. (2006), Pizam et al. (2004), Carr (2005), and Field (1999) suggest that relaxation does have an impact on students' travel motivation. Some interesting comparative insights emerge from an analysis of the current study, which reveal that Thai and Malaysian respondents give a high score to *relaxation* while Portuguese and US students accord it some importance. The Spanish respondents, however, consider this to be not important, and the Brazilians, Indians and Pakistanis believe it to be somewhat unimportant.

In contrast to the *relaxation* motive, was that of *challenge and enjoy* which implicitly involved stretching one's abilities, using physical skills, using imagination, and enjoying a feeling of belonging to places. Studies such as those by Pizam et al. (2004), Kim (2007), Dotson et al. (2008), Bentley et al. (2003), Heung and Leong (2006), and Xu et al. (2009) suggest that seeking thrill and adventure is a growing trend amongst students and young travellers, who claim to enjoy taking on challenges and gaining a sense of fulfilment. The question this poses is how do the respondents from the eight nations in this study compare when it comes to the motive of *challenge and enjoy*, and in this respect, our findings demonstrate some contrasting results. Unexpectedly, we find that the Asian nations of India, Pakistan, Thailand, and Malaysia show positivity in their interest towards these motives, whilst those representing the West such as the USA, Portugal, Spain, and Brazil do not consider *challenge and enjoyment* as important. As stated above that previous studies find thrill seeking and adventure as a growing trend, it

seems to be a growing trend in the Asian Nations. On the other hand, *discovery* was more important for Westerners.

The study also analyses the level of importance respondents give to *knowledge improvement* as a travel motive. It was found respondents from India, Malaysia, and Spain were the only ones who gave it a positive score. Others from Brazil, the USA, Portugal, Pakistan, and Thailand did not consider this important as a motive. It could be that respondents from India, Malaysia, and Spain consider tourism as a means of improving knowledge whereas others see this as activity to enjoy and have fun. Such a difference was identified in the study by Xu et al. (2009) which compared the travel behaviour of students from the UK and China, noting that those from China found it more important to learn about other cultures and history whereas British students were keener to have fun and enjoy the outdoors.

Further, in order to answer the second and third questions of the study, we identify commonalities and differences related to destination attractions/activities across the Asian, North and South American and the European countries. The findings from the current study suggest that perceptions of touristic attractions/activities are different by country although some similarities do exist which is somewhat in line with the studies conducted by Wang and Walker (2010) and Xu et al. (2009). In investigating students' interest in touristic attractions/activities offered by destinations, the study established eight principal components namely, *experiencing adventure; experiencing Native Culture; complementarity/experiencing sites; experiencing generic wildlife; country pursuits; functionality; urban experience; specific wildlife experience*. The analysis of typologies through the use of clustering has resulted in seven clusters namely *explorers, soft explorers, sightseers, novelty seekers, avoiders, functionality seekers, and tourism lovers*. Past studies provide evidences that the student market is not homogenous (Bicikova 2014; Xiao et al., 2015) in the level of interest expressed in different touristic attractions/activities. The large sample and subsequent analysis featured in the current study helps to identify commonalities to craft market segments for a targeted promotion.

Cross-national comparisons in our study provide some interesting new insights. Comparisons between the Asian countries of India, Malaysia, Pakistan, and Thailand, USA and Latin American Brazil, European countries of Portugal and Spain, reveal commonalities as *explorers* amongst the respondents from Brazil and the Asian countries (see Table 6). These respondents seem more interested in country pursuits or in functionality aspects, for example, to conduct business or visit friend or relatives, as well as in experiencing sites' such as memorable sunsets, famous films, rugby events, bush walking, and bird (kiwi) watching. It is noteworthy that all developing countries (Brazil, Pakistan, India, Thailand, and Malaysia) presented a high concentration of potential tourists in that first cluster. Families from those countries have benefited from recent increases in income allowing them to become potential tourists. According to the United Nations Development Programme, the rapid growth of developing countries that has propelled millions out of poverty has also enhanced the living conditions and changed the prospects of life for millions of people (UNITED NATIONS, 2013). The United

Nations also estimates that by 2020, the combined output of the largest developing countries, in which Brazil and India are included, will surpass the most developed economies. This unprecedented growth will allow a large contingent of “explorers” – potential tourists who are original from those developing countries – to seek new opportunities in the world, challenging tourism operators to rethink their actions and tailor new strategies to these incoming new explorers. The main travel motivation for this cluster, with 68% males, 95% single, is to feel challenged and enjoy themselves when travelling.

The second cluster - *soft explorers* - finds Thailand respondents scoring the highest interest (25.7%) in the functionality component involving activities for example, conducting business, further education, and visiting family and friends. The others who scored close were Malaysians with 14.2% and Pakistanis with 13%. This cluster values all travel motivations identified in Table 5 except knowledge improvement.

The third cluster was the *sightseers*. Potential tourists in that cluster have interest in most touristic attractions/activities offered by destinations such as New Zealand, except for the country pursuit and functionality components. The main travel motivation for this cluster which has 60% females, is discovery. The Western countries Spain, Portugal, and the USA (except Brazil) show interest in visiting places that are different to elsewhere. Once again, Brazil differs from the other Western countries and demonstrates a commonality with the Asian nations by showing a lower concentration of respondents in such activities. However, when it comes to the fourth cluster - *novelty seekers* - Brazilian youth show commonalities with all their Western counterparts (USA, Spain and Portugal). The *novelty seekers* are keen to visit unique places in the destination which does not seem to be too attractive for the Asian nations’ students since the concentration of Asians in that cluster is much lower than Western students.

The fifth cluster was the smallest and comprised only 6% of the respondents. With the exception of Brazil, all other countries showed a commonality with low concentration in that cluster, hence displaying no interest in the touristic activities offered by the destination. The cluster was thus named, the *avoiders*. The fact that Brazilians are more concentrated in that cluster than any other country, indicating an avoidance stance towards the destination, might reflect the fact that Brazil is geographically far away from the country that was used as the focus of attractions/activities in the study.

Just as commonality is observed amongst the Western-oriented nations in *novelty seeking*, there is an apparent commonality amongst the Asian nations surveyed in this study - India, Malaysia, Pakistan and Thailand - in the sixth cluster, named *functionality seekers*. They all are interested in the functionality component looking to conduct business, visit family and friends, and further their education. Among the Western countries, Brazil is the one with scores similar to the Asian countries. We can argue that in cluster six – *functionality seekers* – all developing countries scored high. In terms of travel motivations, it is noted that clusters 4, 5 and 6 show similarity in their chosen tourist attractions/activities by giving little importance to travel motivations.

The last cluster is also the second largest in terms of size. The analysis suggests that individuals within this cluster are largely interested in all touristic activities offered by destinations such

as New Zealand. The cluster is named the *tourism lovers* and all Asian nations score high followed by Brazil. This search for new experiences as part of travel motives is growing according to the literature (Bentley et al., 2003; Bicikova, 2014; Chaipinit and Phetvaroon, 2011; Fodness, 1994; Heung and Leong, 2006; Morgan and Xu, 2009; Pearce and Lee, 2005; Xu et al., 2009). Our findings support this notion. Yet, according to the clusters' discriminant functions as identified in this study, we were able to shed light on particular differences between Asians and Westerners, corroborating the abovementioned results. It is noteworthy that Asians place more importance on experiencing native culture, and specific and generic wildlife as touristic attributes. They differ from Western counterparts since these individuals place more importance on elements in clusters 3 (sightseers) and 4 (novelty seekers).

6. Conclusions and Limitations

This study contributes to the limited cross-national research in tourism by investigating 3,431 responses from eight countries representing the Asian, North and South American and the European parts of the globe. It differs from most previous studies conducted in tourism which have focused on comparisons of only two or three countries, as it generates new insights through a comparative investigation of eight nations using the same survey instrument. The study makes a theoretical contribution by comparing and suggesting that students from the USA, Portugal, and Spain are motivated to travel to discover new cultures and places and to explore new ideas; North Americans are also motivated to find social connections. On the other hand, the visit motives of Thai and Malaysians are more centred on relaxing, challenging and enjoying the place, and social connections. Indians have motives related to challenging and enjoying, and improving their knowledge. Tourist typologies are identified resulting in seven clusters which reflect commonalities and differences in contemporary trends/interests in selection of touristic activities by the Asian, North and Latin American and the European University Students.

Further, in addition to the theoretical implications of this research, our findings generate significant implications for tourist destination managers. The results suggest that students as potential tourists from India and Pakistan score high as explorers, and are followed in this motivation by Malaysians, Thai, and Brazilians. They are keen to experience various attractive sites, farm shows, fishing, visiting family and friends, religious places, and famous film sites, in other words exploring soft touristic activities. Such information is important in planning customised promotional strategies for that particular segment or the cluster representing various countries. Likewise, it is noted that students as potential tourists from the USA, Portugal, and Spain are mostly attracted to the idea of visiting places that are different, experiencing nature and wildlife, unlike the students from the Asian nations. Again, this insight provides practitioners with knowledge to help them generate suitable promotional strategies and enables destination managers to cater appropriately. Both destination marketers and managers are encouraged to direct their resources towards creating highly customised product-service bundles to attract and delight visitors. In addition, this study sheds lights on how tourist operators from different countries should tailor their marketing strategies to particular groups

of tourists who are more sensitive to specific actions. It is noteworthy the communalities exist among potential student tourists from developing/developed/Asian/Western countries. Rather than categorising those potential tourists, our study finds that it is better to identify nuances across the populations from countries that might be dissimilar, but which nonetheless appear to yield results that show a pattern of homogeneity.

Finally, like all studies, this one has limitations which relate to the subjectivity of responses, and hence, the results should be considered in light of this. Moreover, the type of respondents – university students – represent a particular market segment, and other potential tourist groups (e.g. elderly tourists, business, family) should be targeted by future studies. Further research can also expand the comparisons to other developing countries, especially those from other regions of the world (e.g. Africa). Nonetheless, despite these limitations, the study provides valuable findings for other researchers undertaking comparative studies, in addition to the significant information it produces for destination marketers and managers to help them use their resources effectively and efficiently in generating customised strategies.

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Figure 1
Cluster members on Discriminant Functions

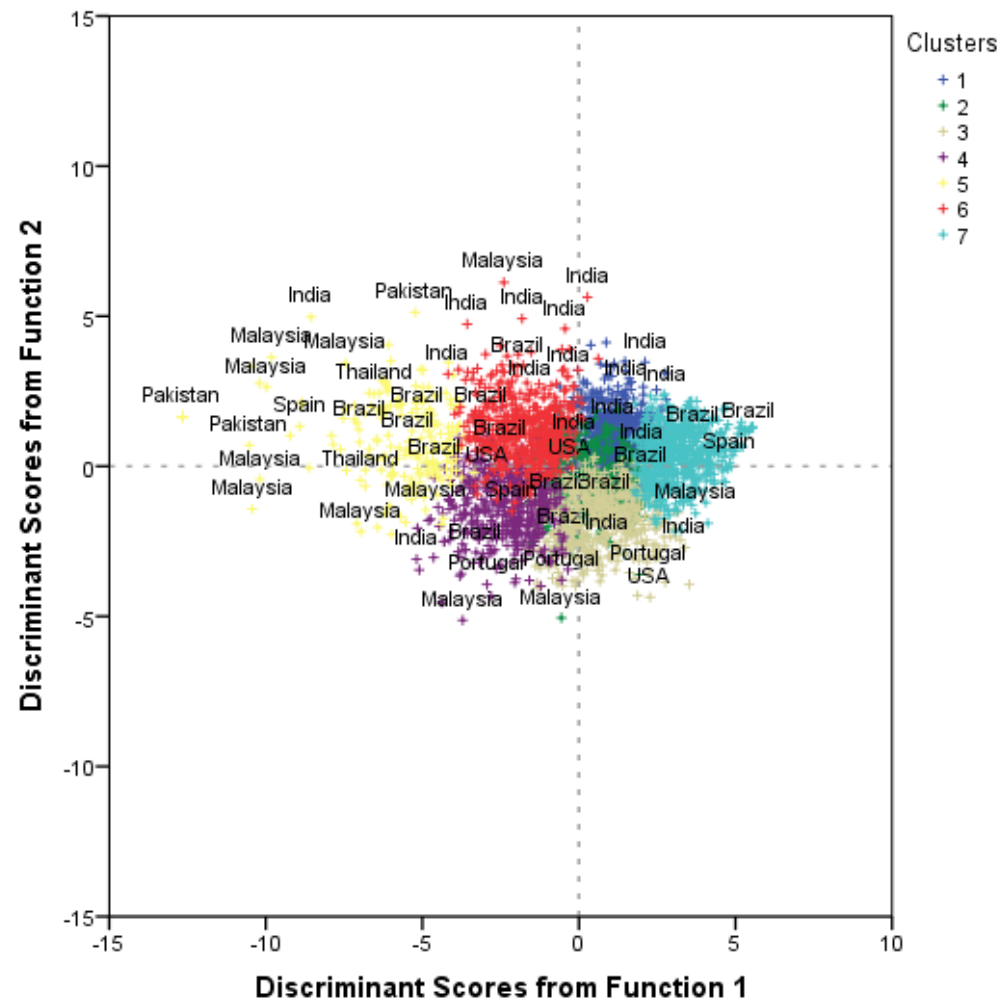


Figure 2

Cluster and Country Centroids in Reduced Discriminant Space

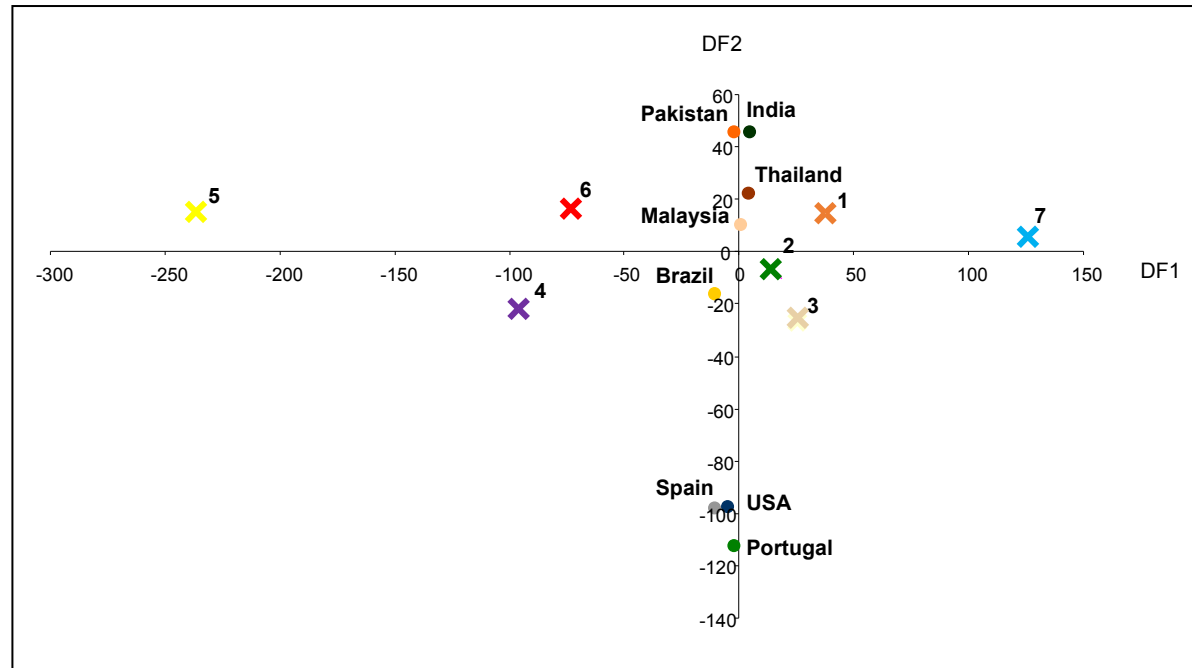


Table 1

Distribution of Respondents by Country

Nationality	Frequency	%
Brazil	327	9.5
India	1036	30.2
Pakistan	388	11.3
Thailand	420	12.2
Spain	218	6.4
USA	204	5.9
Portugal	269	7.8
Malaysia	569	16.6
Total	3431	100.0

Table 2
Preferences for Destination Attributes by Country of Students as Potential Tourists
(mean of standardised scores)

	Experiencing Adventure	Experiencing Native Culture	Complementarity /Experiencing Sites	Experiencing Generic Wildlife	Country Pursuits	Functionality	Urban experience	Experiencing Specific Wildlife	Visit Different Places	Experience Dolphin Swim	View Geothermal Activity and Glaciers	Go Bush Walking
Brazil	-0.106	-0.500	-0.323	-0.302	-0.201	-0.165	0.024	-0.408	-0.069	-0.077	-0.053	0.087
USA	0.109	-0.085	-0.092	0.131	-0.668	-0.539	-0.235	-0.026	0.263	0.061	-0.094	-0.192
Portugal	0.301	0.025	-0.046	-0.121	-0.655	-0.541	0.241	-0.374	0.454	0.064	-0.032	0.219
Spain	-0.341	0.081	-0.137	-0.097	-0.970	-0.512	-0.288	-0.181	0.109	0.086	-0.065	-0.113
Pakistan	-0.236	-0.078	0.104	-0.003	0.274	0.128	-0.121	0.009	-0.292	-0.134	-0.036	-0.144
India	0.071	-0.014	0.246	0.132	0.340	0.243	-0.154	0.119	-0.020	0.103	-0.001	0.060
Thailand	-0.007	0.258	-0.116	-0.063	0.087	0.354	0.369	0.347	-0.061	-0.176	0.230	-0.100
Malaysia	0.016	0.152	-0.126	0.030	0.200	-0.038	0.138	0.013	-0.032	-0.008	-0.040	0.019
KW test					102.153*							
statistic	75.772*	107.419*	144.843*	55.835*	(a)	318.515*	145.266*	194.103*	113.490*	57.085*	24.463*	45.014*

* p<0.01 ; (a) Anova test statistic value.

Table 3
Distribution of Travel Motivations by Country (mean of standardised scores)

Country	Relax	Challenge and Enjoy	Social Connections	Discovery	Knowledge Improvement
Brazil	-0.070	-0.277	0.055	0.020	-0.026
USA	0.064	-0.179	0.461	0.382	-0.312
Portugal	0.072	-0.599	0.059	0.435	-0.095
Spain	-0.429	-0.491	-0.595	0.335	0.019
Pakistan	-0.074	0.053	-0.225	-0.287	-0.088
India	-0.091	0.122	-0.148	-0.161	0.115
Thailand	0.180	0.291	0.174	-0.117	-0.086
Malaysia	0.227	0.224	0.285	0.077	0.078
KW test Statistics	87.134*	271.221*	200.442*	185.559*	78.700*

* p < 0.01

Table 4
Distribution of Preferences for Destination Attributes by Cluster
(mean of standardised scores)

	Cluster							KW test Statistic
	1	2	3	4	5	6	7	
Experiencing Adventure	0.280	0.234	0.032	-0.271	-1.760	-0.684	0.821	1298.661*
Experiencing Native Culture	0.091	0.132	0.344	-1.014	-1.399	-0.207	0.887	1416.960*
Complementarity/Experiencing Sites	0.493	-0.376	0.271	-0.797	-1.570	-0.242	0.800	1443.187*
Experiencing Generic Wildlife	0.224	-0.163	0.535	-0.822	-1.474	-0.360	0.815	1380.987*
Country Pursuits	0.665	-0.224	-0.595	-0.930	-0.985	-0.008	0.906	1657.611*
Functionality	0.461	0.419	-1.125	-0.757	-0.650	0.112	0.755	1523.028*
Urban Experience	-0.152	0.498	0.202	-0.153	-1.366	-0.638	0.712	1034.079*
Experiencing Specific Wildlife	-0.127	0.410	0.311	-0.712	-1.224	-0.309	0.758	1089.977*
Visit places that are different to elsewhere	0.068	0.326	0.529	0.112	-1.659	-0.962	0.571	1214.656*
Experience Dolphin swim	0.238	0.214	0.312	-0.154	-1.703	-0.692	0.624	997.6285*
View geothermal activity and glaciers	0.006	0.354	0.328	-0.328	-1.406	-0.686	0.759	1116.384*
Go bush walking	0.524	-0.651	0.376	-0.812	-1.279	-0.189	0.775	1473.107*

* p<0.01.

Table 5
Distribution of Travel Motivation by Clusters
(mean of standardised scores)

Clusters	Relax	Challenge and Enjoy	Social Connections	Discovery	Knowledge Improvement
(1) Explorers	0.019	0.228	0.137	-0.076	0.120
(2) Soft Explorers	0.114	0.116	0.116	0.116	0.005
(3) Sightseers	0.078	-0.216	-0.081	0.452	0.056
(4) Novelty Seekers	-0.132	-0.601	-0.232	-0.122	-0.268
(5) Avoiders	-0.675	-0.768	-0.820	-1.089	-0.671
(6) Functionality Seekers	-0.282	-0.244	-0.305	-0.464	-0.219
(7) Tourism Lovers	0.413	0.727	0.534	0.488	0.410
KW test statistic	243.183*	716.930*	408.824*	578.614*	261.983*

* p<0.01

Table 6
Distribution of Respondents' Countries by Cluster

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Country	Explorers	Soft Explorers	Sightseers	Novelty Seekers	Avoiders	Functionality Seekers	Tourism Lovers
Brazil	15.0%	7.3%	13.8%	22.9%	11.6%	14.4%	15.0%
USA	10.1%	12.6%	31.2%	23.1%	3.5%	10.1%	9.5%
Portugal	11.9%	9.7%	33.2%	27.6%	1.9%	4.5%	11.2%
Spain	7.3%	6.9%	37.6%	26.6%	7.3%	9.2%	5.0%
Pakistan	23.5%	13.0%	7.2%	11.7%	6.8%	19.2%	18.6%
India	30.0%	10.9%	8.4%	8.0%	4.4%	16.6%	21.7%
Thailand	15.0%	25.7%	5.5%	5.2%	6.9%	16.0%	25.7%
Malaysia	17.0%	14.2%	12.7%	9.8%	6.9%	17.2%	22.1%

Appendix 1

Socio-demographic distribution of respondents by nationality

		Country																TOTAL	
		Brazil		India		Pakistan		Thailand		Spain		USA(a)		Portugal		Malaysia			
		<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
Gender	Male	167	51.1	783	76.3	219	56.7	192	45.7	85	39.4	98	48.0	117	43.5	268	47.1	1929	56.5
	Female	160	48.9	243	23.7	167	43.3	228	54.3	131	60.6	106	52.0	152	56.5	301	52.9	1488	43.5
Age	<i>Mean (SD)</i>	19.8 (1.87)		25.4 (3.19)		27.2 (4.88)		28.3 (6.07)		20.7 (3.63)		25.4 (2.18)		19.1 (1.57)		27.1 (5.26)		24.9 (4.06)	
Marital Status	Yes	59	18.0	30	2.9	39	10.1	28	6.7	2	1.0	9	4.4	0	0.0	144	25.3	311	9.1
	No	268	82.0	990	97.1	347	89.9	392	93.3	207	99.0	195	95.6	268	100.0	425	74.7	3092	90.9
With Children	Yes	41	12.5	29	2.8	45	11.9	28	6.7	7	3.3	5	2.5	0	0.0	132	23.2	287	8.4
	No	286	87.5	1003	97.2	333	88.1	392	93.3	207	96.7	199	97.5	268	100.0	437	76.8	3125	91.6
Personal Income	Below average	43	13.2	112	37.6	46	14.9	132	31.4	26	39.4	73	47.1	21	23.9	238	44.0	691	31.4
	Average	209	64.3	138	46.3	174	56.5	230	54.8	29	43.9	52	33.5	54	61.4	229	42.3	1115	50.7
	Above average	53	16.3	34	11.4	66	21.4	37	8.8	4	6.1	25	16.1	11	12.5	50	9.2	280	12.7
	High	20	6.2	14	4.7	22	7.1	21	5.0	7	10.6	5	3.2	2	2.3	24	4.4	115	5.2
Education	Secondary	60	18.3	143	13.8	30	8.4	19	4.5	8	3.8	---	---	156	58.4	135	23.7	---	---
	Terciary	267	81.7	893	86.2	326	91.6	401	95.5	205	96.2	---	---	111	41.6	433	76.2	---	---

(a) Data about education were not collected in the USA.

Appendix 2

Principal Component Solution of Destination Attributes (a)

PC	Items	Standardised loadings	% of variance explained	Cronbach's Alpha
Experiencing Adventure	To experience rafting	0.705	28.779	0.836
	A chance to go for ballooning	0.704		
	To experience water skiing	0.683		
	To experience bungee jumping	0.666		
	To satisfy a sense of adventure	0.664		
	A chance to go canoeing/kayaking	0.642		
	To experience skiing	0.578		
Experiencing Native Culture	To experience indigenous Maori culture	0.879	7.047	0.790
	To go on tours guided by local Maori people	0.724		
	To buy authentic indigenous Maori souvenirs	0.708		
	To see a Maori Music and Dance Performance	0.605		
Complementarity / Experiencing Sites	To see memorable sunsets	0.778	6.481	0.704
	To visit sights associated with famous films	0.698		
	To visit a Hindu or Buddhist temple or a Mosque	0.586		
	To attend a sporting event (e.g. Rugby)	0.526		
	To see Kiwi birds	0.510		
Experiencing Generic Wildlife	To experience wildlife in natural setting	0.859	4.666	0.781
	To experience other natural attractions/activities	0.820		
	To learn about animals, birds and plants of New Zealand	0.708		
Country Pursuits	To go to fishing	0.841	4.028	0.753
	To go to farm shows	0.763		
	To go on hunting/shooting tours	0.581		
Functionality	To conduct business in New Zealand	0.832	3.751	0.697
	To visit family and friends in New Zealand	0.657		
	To undertake further Tourism & Hospitality education in New Zealand	0.653		
Urban Experience	To experience sight-seeing tours	0.746	3.378	0.658
	To walk in the city	0.734		
Experiencing Specific Wildlife	A visit to albatross colony	0.819	3.274	0.653
	To view seal colony	0.538		

(a) Rotation Method: Promax with Kaiser Normalization; Bartlett's test of sphericity is statistically significant at 0.01 level; KMO value of 0.924.

Appendix 3

Principal Component Solution of Travel Motivations (a)

PC	Items	Standardised loadings	% of variance explained	Cronbach's Alpha
Relax	To relax physically	0.760	28.035	0.747
	To rest	0.702		
	To mentally relax	0.676		
	To be in a calm atmosphere	0.674		
	To avoid the hustle and bustle of daily life	0.651		
Challenge and Enjoy	To challenge my abilities	0.800	11.620	0.736
	To use my physical abilities/skills in sport	0.723		
	To use my imagination	0.707		
	To gain a feeling of belonging with places	0.691		
Social Connections	To have a good time with existing friends	0.858	8.332	0.716
	To build relationships with close friends	0.773		
	To build relationships with my family	0.583		
	To be with others and make new friends	0.580		
Discovery	To see new cultures	0.796	7.513	0.656
	To discover new places and things	0.712		
	To explore new ideas	0.605		

(a) Rotation Method: Promax with Kaiser Normalization; Bartlett's test of sphericity is statistically significant at 0.01 level; KMO value of 0.854.

Appendix 4

Socio-demographic Distribution by Tourist Segments

		Segments															
		(1)		(2)		(3)		(4)		(5)		(6)		(7)			
		Explorers		Soft Explorers		Sightseers		Novelty Seekers		Avoiders		Functionality Seekers		Tourism Lovers			
		N	%	N	%	N	%	N	%	N	%	N	%	N	%	Pearson χ^2	
Cluster size		659	19.7	432	12.9	482	14.4	450	13.5	200	6.0	494	14.8	624	18.7	N	%
Gender	Male	451	68.6	216	50.1	191	39.6	230	51.3	134	68.0	317	64.4	336	54.0	131.893*	
	Female	206	31.4	215	49.9	291	60.4	218	48.7	63	32.0	175	35.6	286	46.0		
Age	Mean (SD)	26.2 (3.98)		27.4 (5.38)		27.6 (5.35)		26.8 (4.21)		27.1 (5.28)		26.7 (4.48)		26.4 (4.44)		1.032(a)	
Marital Status	Yes	34	5.2	43	10.0	41	8.6	38	8.5	31	15.8	66	13.6	47	7.6	37.249*	
	No	621	94.8	389	90.0	436	91.4	408	91.5	165	84.2	420	86.4	575	92.4		
With Children	Yes	36	5.5	43	10.0	37	7.7	34	7.6	24	12.1	53	10.8	47	7.6	17.026*	
	No	619	94.5	387	90.0	441	92.3	414	92.4	175	87.9	440	89.2	575	92.4		
Personal Income	Below average	130	33.2	94	31.5	98	35.0	81	29.3	50	33.6	108	30.5	121	31.5	14.886*	
	Average	182	46.5	154	51.7	139	49.6	139	50.4	81	54.4	184	52.0	194	50.5		
	Above average	56	14.3	39	13.1	31	11.1	42	15.2	10	6.7	47	13.3	45	11.7		
	High	23	5.9	11	3.7	12	4.3	14	5.1	8	5.4	15	4.2	24	6.2		

* p<0.01

(a) Anova F statistic value.

Appendix 5

Canonical Discriminant Functions: overall model fit and discriminant variables

Function	Discriminant Variables	Standardised Loadings (a)	% of Variance	Canonical Correlation	Wilks' Lambda	χ^2 Statistic (df)
1	Go bush walking	0.771	73.8	0.918	0.039	10785.347 * (72)
2	Experiencing Native Culture	0.712	16.1	0.734	0.249	4626.129* (55)
	Experiencing Specific Wildlife	0.605				
	Experiencing Generic Wildlife	0.590				
3	Experience Dolphin swim	0.670	7.3	0.589	0.541	2045.016* (40)
	Complementarity/ Experiencing Sites	0.457				
4	Functionality	0.836	2.6	0.398	0.829	625.701* (27)
	Country Pursuits	0.523				
5	View geothermal activity and glaciers	0.639	0.1	0.103	0.985	50.150* (16)
		0.601				
6	Urban experience	0.842	0.1	0.067	0.996	14.965** (7)
	Experiencing Adventure	0.425				

* p<0.01; ** p <0.05; (a) Varimax rotation method.